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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/553,304

10/14/2005

Arianne Margarethe Corinne Van Muiswinkel

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
595 MINER ROAD
CLEVELAND, OH 44143

EXAMINER

AZARIAN, SEYED H

ART UNIT

PAPER NUMBER

2624

MAIL DATE

DELIVERY MODE

11/26/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/553,304	Applicant(s) VAN MUISWINKEL ET AL.	
	Examiner Seyed Azarian	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5 and 7 is/are rejected.
- 7) ☒ Claim(s) 3 and 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/14/2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. Claim 4 is rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. While the claims recite a series of steps or acts to be performed, a statutory “process” under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing (Reference the May 15, 2008 memorandum issued by Deputy Commissioner for Patent Examining Policy, John J. Love, titled “Clarification of ‘Processes’ under 35 U.S.C. 101”). The instant claims neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claim 7 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows;

Claim 7 states, “computer program” do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer. In order to be statutory the claim should state, “A computer readable medium storing a computer application program read by a computer system; or a computer

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readable medium encoded with one of the following: a “computer program”; “software”; “computer executable instructions”; or instructions capable of being executed by a computer”; or state, “A computer readable medium “storing a” computer program; or state, “A computer readable medium “embodied with a” computer application program read by a computer system”.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 1-2, 4-5 and 7, are rejected under 35 U.S.C. 102(e) as being anticipated by Thomas E. Conturo et al (Tracking Neuronal Fiber Pathways in the Living Human Brain).

Regarding claim 1, Conturo discloses system for detecting fiber tracts of a human or animal, comprising (see abstract, developed noninvasive neuronal fiber tracking for use in living humans, utilizing the unique ability of MRI to characterize water diffusion. We reconstructed fiber trajectories throughout the brain by tracking the direction of fastest diffusion (the fiber direction) from a grid of seed points, and then selected tracks that join anatomically or functionally (functional MRI) defined regions. We demonstrate diffusion tracking of fiber bundles in a variety of white matter classes

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with examples in the corpus callosum, geniculo-calcarine, and subcortical association pathways);

memory means for holding diffusion images of a region of interest of said human or animal, first processing means connected to the memory means for deriving fibre tract data from the diffusion images, and second processing means for processing the fibre tracts derived by the first processing means, wherein the first processing means includes a discriminator to select the fibre tract data to be processed by the second processing means (see Fig. 1, also page 10422-10423, diffusion tracking of ceommissural fibers. 3D projection views (a and b) of diffusion tracks in the splenium of the corpus callosum selected with ellipsoid filtering volumes (black). Tracks are viewed from above (a) and from the anterior-right direction (b). In e, the general anatomical location of tracks and ellipsoids is shown in 2D overlay (see Methods) on a brain slice that cuts through the splenium (T1-weighted slice 156). Magnified 2D overlays (d) of tracks and ellipsoids onto selected slices (interpolated slices numbered superior-to-inferior with 24 slices/cm). The green boxed region surrounding the 3D projections (a and b) corresponds to the green squared regions (region of interest) on 2D anatomical overlays (c and d). Tracks were selected by ellipsoid filtration of whole-brain diffusion data (computed at an anisotropy threshold). Tracks that passed through the splenium were observed to divide into two groups laterally and were color coded based on passage into lateral ellipsoids (black circles on all images). Tracks projected to the occipital lobes (red tracks) and parietal lobes (blue tracks), and had a topological relation within the splenium best seen in a and slice 156 in d. The oblique 3D view (b)

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shows the more superior projection of the parietal tracks (blue). Tracks were thinned by a factor of 8 for 3D display.

Regarding claim 2, Conturo discloses system according to claim 1, wherein the discriminator prevents selecting fibre tract data that jointly represent a fibre tract or fibre tracts of less than a pre-determined length (page 10424, Diffusion Track Reconstruction and Display. Single diffusion tracks were reconstructed by bidirectionally following the direction of fastest diffusion, in 0.5-mm steps, starting from an initial location (seed point) to a termination point. Tracks were terminated where A. fell below an assigned threshold (predetermined), typically in gray matter. The tensor D and its eigenvector corresponding to the largest Eigen value were calculated (26) at each step, from interpolated DT-MRI data, to define the direction of the next step. A whole-brain track data set was produced by repeating this procedure for every seed point above the track ability threshold in a 1.0-mm cubic grid of seed points).

Allowable Subject Matter

5. Claims 3 and 6 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seyed Azarian whose telephone number is (571) 272-7443. The examiner can normally be reached on Monday through Thursday from 6:00 a.m. to 7:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehta Bhavesh, can be reached at (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application information Retrieval (PAIR) system. Status information for published application may be obtained from either Private PAIR or Public PAIR.

Status information about the PAIR system, see [http:// pair-direct.uspto.gov](http://pair-direct.uspto.gov). Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*/Seyed Azarian/
Primary Examiner, Art Unit 2624
Group Art Unit 2624
November 22,*